OIPE

RAW SEQUENCE LISTING   DATE: 05/20/2002
PATENT APPLICATION: **US/09/996,015**   TIME: 15:54:52

Input Set : **A:\Cg-81cil.app**
Output Set: **N:\CRF3\05202002\I996015.raw**

ENTERED

```
 3 <110> APPLICANT: Quinn, Kerry E.
 4        Pena, Carol A. E.
 5        Li, Li
 6        Spaderna, Steven K.
 7        Leite, Marlo W.
 9 <120> TITLE OF INVENTION: Aortic Carboxypeptidase-Like Proteins and Nucleic Acids
10        Encoding Same
12 <130> FILE REFERENCE: 15966-581 CIP
14 <140> CURRENT APPLICATION NUMBER: 09/996,015
15 <141> CURRENT FILING DATE: 2001-11-28
17 <150> PRIOR APPLICATION NUMBER: 09/641,741
18 <151> PRIOR FILING DATE: 2000-08-18
20 <150> PRIOR APPLICATION NUMBER: 60/159,613
21 <151> PRIOR FILING DATE: 1999-10-14
23 <150> PRIOR APPLICATION NUMBER: 60/175,534
24 <151> PRIOR FILING DATE: 2000-01-11
26 <150> PRIOR APPLICATION NUMBER: 60/224,086
27 <151> PRIOR FILING DATE: 2000-08-09
29 <160> NUMBER OF SEQ ID NOS: 47
31 <170> SOFTWARE: PatentIn Ver. 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 2382
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo sapiens
38 <400> SEQUENCE: 1
39 gcggggggca ggaaggggcg ggggctcgg cgcactcggc aggaagagac cgacccgcca 60
40 cccgccgtag cccgcgcgcc cctggcactc aatccccgcc atgtgggggc tcctgctcgc 120
41 cctggccgcc ttcgcgccgg ccgtcggccc ggctctgggg gcgcccagga actcggtgct 180
42 gggcctcgcg cagcccggga ccaccaaggt cccaggctcg accccggccc tgcatagcag 240
43 cccggcacag ccgccggcgg agacagctaa cgggacctca gaacagcatg tccggattcg 300
44 agtcatcaag aagaaaaagg tcattatgaa gaagcggaag aagctaactc taactcgccc 360
45 caccccactg gtgactgccg ggcccttgt gacccccact ccagcaggga ccctcgaccc 420
46 cgctgagaaa caagaaacag gctgtcctcc tttgggtctg gagtccctgc gagtttcaga 480
47 tagccggctt gaggcatcca gcagccagtc ctttggtctt ggaccacacc gaggacggct 540
48 caacattcag tcaggcctgg aggacggcga tctatatgat ggagcctggt gtgctgagga 600
49 gcaggacgcc gatccatggt ttcaggtgga cgctgggcac cccacccgct tctcgggtgt 660
50 tatcacacag ggcaggaact ctgtctggag gtatgactgg gtcacatcat acaaggtcca 720
51 gttcagcaat gacagtcgga cctggtgggg aagtaggaac cacagcagtg ggatggacgc 780
52 agtatttcct gccaattcag acccagaaac tccagtgctg aacctcctgc cggagcccca 840
53 ggtggcccgc ttcattcgcc tgctgcccca gacctggctc cagggaggcg cgccttgcct 900
54 ccgggcagag atcctggcct gcccagtctc agaccccaat gacctattcc ttgaggcccc 960
55 tgcgtcggga tcctctgacc ctctagactt tcagcatcac aattacaagg ccatgaggaa 1020
56 gctgatgaag caggtacaag agcaatgccc caacatcacc cgcatctaca gcattgggaa 1080
```

RAW SEQUENCE LISTING   DATE: 05/20/2002
PATENT APPLICATION: **US/09/996,015**   TIME: 15:54:52

Input Set : **A:\Cg-81cil.app**
Output Set: **N:\CRF3\05202002\I996015.raw**

```
57 gagctaccag ggcctgaagc tgtatgtgat ggaaatgtcg dacaagcctg gggagcatga 1140
58 gctgggggag cctgaggtgc gctacgtggc tggcatgcat gggaacgagg ccctggggcg 1200
59 ggagttgctt ctgctcctga tgcagttcct gtgccatgag ttcctgcgag ggaacccacg 1260
60 ggtgacccgg ctgctctctg agatgcgcat tcacctgctg ccctccatga accctgatgg 1320
61 ctatgagatc gcctaccacc ggggttcaga gctggtgggc tgggccgagg gccgctggaa 1380
62 caaccagagc atcgatctta accataattt tgctgacctc aacacaccac tgtgggaagc 1440
63 acaggacgat gggaaggtgc cccacatcgt ccccaaccat cacctgccat tgcccactta 1500
64 ctacaccctg cccaatgcca ccgtggctcc tgaaacgcgg gcagtaatca agtggatgaa 1560
65 gcggatcccc tttgtgctaa gtgccaacct ccacgggggt gagctcgtgg tgtcctaccc 1620
66 attcgacatg actcgcaccc cgtgggctgc ccgcgagctc acgcccacac cagatgatgc 1680
67 tgtgtttcgc tggctcagca ctgtctatgc tggcagtaat ctggccatgc aggacaccag 1740
68 ccgccgaccc tgccacagcc aggacttctc cgtgcacggc aacatcatca acggggctga 1800
69 ctggcacacg gtccccggga gcatgaatga cttcagctac ctacacacca actgctttga 1860
70 ggtcactgtg gagctgtcct gtgacaagtt ccctcacgag aatgaattgc cccaggagtg 1920
71 ggagaacaac aaagacgccc tcctcaccta cctggagcag gtgcgcatgg gcattgcagg 1980
72 agtggtgagg gacaaggaca cggagcttgg gattgctgac gctgtcattg ccgtggatgg 2040
73 gattaaccat gacgtgacca cggcgtgggg cggggattat tggcgtctgc tgaccccagg 2100
74 ggactacatg gtgactgcca gtgccgaggg ctaccattca gtgacacgga actgtcgggt 2160
75 cacctttgaa gagggccect tcccctgcaa tttcgtgctc accaagactc ccaaacagag 2220
76 gctgcgcgag ctgctggcag ctggggccaa ggtgcccccg gaccttcgca ggcgcctgga 2280
77 gcggctaagg ggacagaagg attgatacct gcggtttaag agccctaggg caggctggac 2340
78 ctgtcaagac gggaaggga agagtagaga gggagggaca aa 2382
81 <210> SEQ ID NO: 2
82 <211> LENGTH: 734
83 <212> TYPE: PRT
84 <213> ORGANISM: Homo sapiens
86 <400> SEQUENCE: 2
87 Met Trp Gly Leu Leu Leu Ala Leu Ala Ala Phe Ala Pro Ala Val Gly
88  1               5                   10                  15
90 Pro Ala Leu Gly Ala Pro Arg Asn Ser Val Leu Gly Leu Ala Gln Pro
91              20                  25                  30
93 Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His Ser Ser Pro
94          35                  40                  45
96 Ala Gln Pro Pro Ala Glu Thr Ala Asn Gly Thr Ser Glu Gln His Val
97      50                  55                  60
99 Arg Ile Arg Val Ile Lys Lys Lys Val Ile Met Lys Lys Arg Lys
100 65                  70                  75                  80
102 Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu
103              85                  90                  95
105 Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu
106              100                 105                 110
108 Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser
109          115                 120                 125
111 Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg
112      130                 135                 140
114 Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp
115 145                 150                 155                 160
117 Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val
118              165                 170                 175
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/996,015

DATE: 05/20/2002
TIME: 15:54:52

Input Set : **A:\Cg-81cil.app**
Output Set: **N:\CRF3\05202002\I996015.raw**

```
120 Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg
121             180             185             190
123 Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe
124         195             200             205
126 Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly
127     210             215             220
129 Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu
130 225             230             235             240
132 Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro
133             245             250             255
135 Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu
136             260             265             270
138 Ala Cys Pro Val Ser Asp Pro Asn Asp Leu Phe Leu Glu Ala Pro Ala
139         275             280             285
141 Ser Gly Ser Ser Asp Pro Leu Asp Phe Gln His His Asn Tyr Lys Ala
142     290             295             300
144 Met Arg Lys Leu Met Lys Gln Val Gln Glu Gln Cys Pro Asn Ile Thr
145 305             310             315             320
147 Arg Ile Tyr Ser Ile Gly Lys Ser Tyr Gln Gly Leu Lys Leu Tyr Val
148             325             330             335
150 Met Glu Met Ser Asp Lys Pro Gly Glu His Glu Leu Gly Glu Pro Glu
151         340             345             350
153 Val Arg Tyr Val Ala Gly Met His Gly Asn Glu Ala Leu Gly Arg Glu
154     355             360             365
156 Leu Leu Leu Leu Leu Met Gln Phe Leu Cys His Glu Phe Leu Arg Gly
157     370             375             380
159 Asn Pro Arg Val Thr Arg Leu Leu Ser Glu Met Arg Ile His Leu Leu
160 385             390             395             400
162 Pro Ser Met Asn Pro Asp Gly Tyr Glu Ile Ala Tyr His Arg Gly Ser
163             405             410             415
165 Glu Leu Val Gly Trp Ala Glu Gly Arg Trp Asn Asn Gln Ser Ile Asp
166         420             425             430
168 Leu Asn His Asn Phe Ala Asp Leu Asn Thr Pro Leu Trp Glu Ala Gln
169     435             440             445
171 Asp Asp Gly Lys Val Pro His Ile Val Pro Asn His His Leu Pro Leu
172     450             455             460
174 Pro Thr Tyr Tyr Thr Leu Pro Asn Ala Thr Val Ala Pro Glu Thr Arg
175 465             470             475             480
177 Ala Val Ile Lys Trp Met Lys Arg Ile Pro Phe Val Leu Ser Ala Asn
178             485             490             495
180 Leu His Gly Gly Glu Leu Val Val Ser Tyr Pro Phe Asp Met Thr Arg
181         500             505             510
183 Thr Pro Trp Ala Ala Arg Glu Leu Thr Pro Thr Pro Asp Asp Ala Val
184     515             520             525
186 Phe Arg Trp Leu Ser Thr Val Tyr Ala Gly Ser Asn Leu Ala Met Gln
187     530             535             540
189 Asp Thr Ser Arg Arg Pro Cys His Ser Gln Asp Phe Ser Val His Gly
190 545             550             555             560
192 Asn Ile Ile Asn Gly Ala Asp Trp His Thr Val Pro Gly Ser Met Asn
```

Input Set : **A:\Cg-81cil.app**
Output Set: **N:\CRF3\05202002\I996015.raw**

```
193                 565                 570                 575
195 Asp Phe Ser Tyr Leu His Thr Asn Cys Phe Glu Val Thr Val Glu Leu
196             580                 585                 590
198 Ser Cys Asp Lys Phe Pro His Glu Asn Glu Leu Pro Gln Glu Trp Glu
199         595                 600                 605
201 Asn Asn Lys Asp Ala Leu Leu Thr Tyr Leu Glu Gln Val Arg Met Gly
202     610                 615                 620
204 Ile Ala Gly Val Val Arg Asp Lys Asp Thr Glu Leu Gly Ile Ala Asp
205 625                 630                 635                 640
207 Ala Val Ile Ala Val Asp Gly Ile Asn His Asp Val Thr Thr Ala Trp
208             645                 650                 655
210 Gly Gly Asp Tyr Trp Arg Leu Leu Thr Pro Gly Asp Tyr Met Val Thr
211             660                 665                 670
213 Ala Ser Ala Glu Gly Tyr His Ser Val Thr Arg Asn Cys Arg Val Thr
214         675                 680                 685
216 Phe Glu Glu Gly Pro Phe Pro Cys Asn Phe Val Leu Thr Lys Thr Pro
217     690                 695                 700
219 Lys Gln Arg Leu Arg Glu Leu Leu Ala Ala Gly Ala Lys Val Pro Pro
220 705                 710                 715                 720
222 Asp Leu Arg Arg Arg Leu Glu Arg Leu Arg Gly Gln Lys Asp
223             725                 730
226 <210> SEQ ID NO: 3
227 <211> LENGTH: 20190
228 <212> TYPE: DNA
229 <213> ORGANISM: Homo sapiens
231 <220> FEATURE:
232 <221> NAME/KEY: misc_feature
233 <222> LOCATION: (2206)
234 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
236 <220> FEATURE:
237 <221> NAME/KEY: misc_feature
238 <222> LOCATION: (2207)
239 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
241 <220> FEATURE:
242 <221> NAME/KEY: misc_feature
243 <222> LOCATION: (2209)
244 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
246 <220> FEATURE:
247 <221> NAME/KEY: misc_feature
248 <222> LOCATION: (2211)
249 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <222> LOCATION: (2214)
254 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
256 <220> FEATURE:
257 <221> NAME/KEY: misc_feature
258 <222> LOCATION: (2215)
259 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
```

```
261 <220> FEATURE:
262 <221> NAME/KEY: misc_feature
263 <222> LOCATION: (2218)
264 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
266 <220> FEATURE:
267 <221> NAME/KEY: misc_feature
268 <222> LOCATION: (2220)
269 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
271 <220> FEATURE:
272 <221> NAME/KEY: misc_feature
273 <222> LOCATION: (2221)
274 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
276 <220> FEATURE:
277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: (2222)
279 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (2224)
284 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
286 <220> FEATURE:
287 <221> NAME/KEY: misc_feature
288 <222> LOCATION: (2226)
289 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
291 <220> FEATURE:
292 <221> NAME/KEY: misc_feature
293 <222> LOCATION: (2227)
294 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
296 <220> FEATURE:
297 <221> NAME/KEY: misc_feature
298 <222> LOCATION: (2229)
299 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
301 <220> FEATURE:
302 <221> NAME/KEY: misc_feature
303 <222> LOCATION: (2230)
304 <223> OTHER INFORMATION: Wherein n is A, C, G, or T
306 <400> SEQUENCE: 3
307 atgtgggggc tcctgctcgc cctggccgcc ttcgcgccgg ccgtcggccc ggctctgggg 60
308 gcgcccagga actcggtgct gggcctcgcg cagcccggga ccaccaaggt cccaggctcg 120
309 accccggccc tgcatagcag cccggcacag ccgccggcgg agacagctaa cgggacctca 180
310 gaacagcatg tccggattcg agtcatcaag aagaaaaagg tcattatgaa gaagcggaag 240
311 aagctaactc taactcgccc cacccccactg gtgactgccg ggccccttgt gacccccact 300
312 ccagcaggga ccctcgaccc cgctgagaaa caagaaacag gctgtcctcc tttgggtctg 360
313 gagtccctgc gagtttcaga tagccggctt gaggcatcca gcagccagtc ctttggtctt 420
314 ggaccacacc gaggacggct caacattcag tcaggcctgg aggacggcga tctatatgat 480
315 ggagcctggt gtgctgagga gcaggacgcc gatccatggt ttcaggtgga cgctgggcac 540
316 cccacccgct tctcgggtgt tatcacacag ggcaggaact ctgtctggag gtatgactgg 600
317 gtcacatcat acaaggtcca gttcagcaat gacagtcgga cctggtgggg aagtaggaac 660
318 cacagcagtg ggatggacgc agtatttcct gccaattcag acccagaaac tccagtgctg 720
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/20/2002
PATENT APPLICATION: **US/09/996,015**   TIME: 15:54:53

Input Set : **A:\Cg-81cil.app**
Output Set: **N:\CRF3\05202002\I996015.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 2206,2207,2209,2211,2214,2215,2218,2220,2221,2222,2224,2226
Seq#:3; N Pos. 2227,2229,2230